

AMENDMENTS TO THE CLAIMS

This listing of claims is to replace all prior versions and listings of claims in the application.

1-29. (Cancelled)

30. (Currently amended) A method of treating a patient with cell damage or disease comprising transplanting ~~the cells of any of claims 1-6~~ into said patient a population of at least ten cells, wherein at least 30% of said cells are multipotent mammalian cells, said multipotent mammalian cells form non-adherent clusters in culture, are self renewing, are positive for nestin and fibronectin protein, and differentiate into both neuronal and non-neuronal cell types.

31. (Original) The method of claim 30, wherein the multipotent cells are autologously derived.

32. (Original) The method of claim 30, wherein the multipotent cells are derived from a genetically related donor.

33. (Original) The method of claim 30, wherein the cell damage or disease is selected from a neurodegenerative disease, diabetes, heart disease, heart attack, or stroke.

34. (Original) The method of claim 30, wherein the cell damage or disease is the result bacterial or viral infection.

35. (Currently amended) The method of claim 30, wherein the cell damage or disease is the result of traumatic injury ~~including fractures, lacerations, and burns.~~

36. (Original) The method of claim 30, wherein the multipotent cells are transplanted at the site of cell damage or disease.

37. (Original) The method of claim 30, wherein the multipotent cells are delivered to the site of cell damage via the bloodstream.

38. (Original) The method of claim 30, wherein the patient is a human patient.

39-63. (Cancelled)

64. (New) The method of claim 30, wherein said population comprises fewer than 30 percent lineage committed cells and wherein said multipotent mammalian cells differentiate into ectodermal and mesodermal cells.

65. (New) The method of claim 30, wherein said multipotent mammalian cells can proliferate in culture in the absence of exogenous EGF.

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~~67~~ 66. (New) The method of claim 30, wherein said multipotent mammalian cells are negative for vimentin and cytokeratin protein.

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~~68~~ 67. (New) The method of claim ⁶⁶~~67~~, wherein said multipotent mammalian cells are negative for p75 protein.

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~~69~~ 68. (New) The method of claim 35, wherein said traumatic injury comprises fractures, lacerations, or burns.

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~~70~~ 69. (New) A method of treating a patient with cell damage or disease comprising:
(a) culturing a dissociated sample of epithelial tissue;

(b) isolating non-adherent cells from the culture obtained from said dissociated sample, said non-adherent cells are positive for nestin and fibronectin protein, are self renewing, and differentiate into neuronal and non-neuronal cell types; and

(c) transplanting into said patient said non-adherent cells or progeny thereof in a patient with cell damage or disease.

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~~71~~. (New) The method of claim ⁶⁹~~70~~, wherein said progeny of non-adherent cells comprise neuronal cells.

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~~72~~. (New) The method of claim ⁶⁹~~70~~, wherein said progeny of non-adherent cells comprise non-neuronal cells.

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~~73~~. (New) The method of claim ⁶⁹~~70~~, wherein said progeny of non-adherent cells are self-renewing, are positive for nestin and fibronectin protein, and differentiate into neuronal and non-neuronal cell types.

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~~74~~. (New) The method of claim ⁶⁹~~70~~, wherein said cell damage or disease is the result of traumatic injury.

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~~75~~. (New) The method of claim ⁷³~~74~~, wherein said traumatic injury comprises fractures, lacerations, or burns.

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~~76~~. (New) The method of claim ⁶⁹~~70~~, wherein the multipotent cells are autologously derived.

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~~77~~. (New) The method of claim ⁶⁹~~70~~, wherein the cell damage or disease is selected from a neurodegenerative disease, diabetes, heart disease, heart attack, or stroke.

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~~78~~. (New) The method of claim ⁶⁹~~70~~, wherein the cell damage or disease is the result bacterial or viral infection.

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~~79~~. (New) The method of claim ⁶⁹~~70~~, wherein the multipotent cells are transplanted at the site of cell damage or disease.

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~~80~~. (New) The method of claim ⁶⁹~~70~~, wherein the multipotent cells are delivered to the site of cell damage via the bloodstream.

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~~81~~. (New) The method of claim ⁶⁹~~70~~, wherein the patient is a human patient.

⁸¹
~~82~~. (New) The method of claim ⁶⁹~~70~~, wherein said population comprises fewer than 30 percent lineage committed cells and wherein said multipotent mammalian cells differentiate into ectodermal and mesodermal cells.

⁸²
~~83~~. (New) The method of claim ⁶⁹~~70~~, wherein said multipotent mammalian cells can proliferate in culture in the absence of exogenous EGF.

⁸³
~~84~~. (New) The method of claim ⁶⁹~~70~~, wherein said multipotent mammalian cells are negative for vimentin and cytokeratin protein.

⁸⁴
~~85~~. (New) The method of claim ⁸³~~84~~, wherein said multipotent mammalian cells are negative for p75 protein.